

REMARKS

Applicant has discovered a pre-moistened wet wipe comprising a nonwoven web, or substrate, of fibers bonded with a water soluble or redispersible polymeric binder composition and in contact with an aqueous lotion composition that will not dissolve or redisperse the binder off the nonwoven web, which lotion composition is also essentially free of boric acid and its salt derivatives. The aqueous lotion composition contains one or more compounds which preferentially tie up, or bind, the water in the aqueous lotion, i.e., water-binding compounds, so that the water does not substantially dissolve any water soluble fraction of the nonwoven binder which in turn would cause redispersal of any other portion of the nonwoven binder resulting in disintegration of the web. The water-binding compound is present in sufficient quantity so as to bind enough of the water in the lotion composition to afford a nonwoven substrate having a wet tensile strength at least as great as that achieved by the same bonded nonwoven substrate in contact with an aqueous 4 wt% boric acid solution.

The pre-moistened wipe is essentially free from necessarily requiring any boric acid or its borate salt derivatives in the aqueous lotion.

Claims 1, 2, 4, 5, and 7-15 remain rejected under 35 USC 102b as anticipated by Richards (US 5,629,081). Applicant submits Richards neither teaches nor suggests the subject matter of these claims. Richards is deficient with respect to any teaching or suggestion of an aqueous composition for the wet wipes that contains less than 0.05 wt% boric acid or its borate salt derivatives. The Abstract and Col 2/64-67, 3/61-65, and 4/45-53 of Richards teach the need/requirement for boric acid at about 0.1 to 0.9 wt%, and more preferably about 0.3 to about 0.7 wt%.

The Examiner has asserted a position that "about 0.1 to 0.9% by wt" encompasses less than 0.05 wt%" and anticipates the claims, i.e., renders them lacking in novelty. Applicant strongly disagrees with the Examiner's position. The value "less than 0.05 wt%" is less than one-half (<50%) of "0.1 wt%". The adverb "about" does not convey to a worker of ordinary skill in the art that Richards' requirement for boric acid can be less than 50% of the stated value of 0.1 wt% and still achieve a usable wipe, especially where the more preferred lower level is about 0.3 wt% and where Richards teaches the need for the boric acid to

provide the wet strength. Richards' teaching is in contrast to the teachings and claims of the present application.

The use of the term "about" permits some leeway in the amount of the required constituent. Such broadening usages as "about" must be given reasonable scope; they must be viewed by the decision maker as they would be understood by persons experienced in the field of the invention, i.e., the worker of ordinary skill in the art. *Chemical Separation Technology Inc. v U. S.*, 63 USPQ2d 1114, 1123 (CAFC 2002) Such worker recognizes from Richards that less than half the amount taught as required for wet strength is far outside the reasonably understood scope of the Richards invention.

Also, the worker of ordinary skill in the art using his knowledge of proper scientific interpretation and "rounding off" of numbers would understand that "about 0.1" may possibly comprise a numerical range of 0.05 to less than 0.15. It would certainly not include a number less than 0.05. Furthermore, Applicant submits Richards teaches away from going below about 0.1 wt% by his preferred lower amount of 0.3 wt% and Richards' need for boric acid to provide the wet strength.

Applicant submits the Examiner is merely conjecturing as to the breadth of Richards' teaching to a worker of ordinary skill in the art. The Examiner is reading into the language a scope far beyond that which is reasonable to such worker. Moreover, the Examiner has cited no support for such an expansive interpretation of the word "about" as an adverb modifying a particular numerical value to include less than 50% of such value.

Applicant submits that "about 0.1 wt%" encompassing " $\geq 0.05$  wt%" may be reasonable; encompassing " $< 0.05$  wt%" is most assuredly not. The Examiner has recognized the "0.01 wt%" limitation of Claim 3 is not anticipated by Richards, being less than one-tenth the lower limit of Richards. Where is the crossover line from anticipation to obviousness? Applicant contends that such line is above 0.05 wt%.

Claims 3, 6, and 16-20 were rejected under 35 USC 103a as unpatentable over Richards in view of Daniels (US 4,245,744). Applicant submits such combination of references neither teaches nor suggests the claimed subject matter as a whole. The

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deficiency of the primary reference Richards, namely, no teaching of an aqueous composition for the wet wipes that contains less than 0.05 wt% boric acid or its borate salt derivatives (<0.01 wt in Claim 3), is not remedied by Daniels which the Examiner states "describes impregnated with PVA and some boric acid and metal salts". Richards requires boric acid at about 0.1 to 0.9 wt% and Daniels teaches "certain water soluble salts known to react with polyvinyl alcohol to effect precipitation or gelling thereof, may be employed". Applicant claims the use of "water-binding compounds", not polyvinyl alcohol-precipitating or polyvinyl alcohol-gelling compounds. Such combination of Richards and Daniels as applied by the Examiner does not teach or suggest the claimed subject matter as a whole, i.e., wet wipes in contact with an aqueous composition that contains less than 0.05 wt% boric acid or its borate salt derivatives and a sufficient amount of a water-binding compound to prevent the dissolution/redispersion of the water soluble/dispersible components of the binder composition while imbuing the nonwoven with a wet tensile strength that is at least as great as that afforded by a 4 wt% boric acid solution. .

In view of the above remarks, Applicant requests reconsideration and withdrawal of the 102 and 103 rejections.

Believing the application is now in condition for allowance, Applicant solicits an action to that effect.

Respectfully submitted,



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